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| 10/081,560 | 02/20/2002 | Michael Ely | 0600/96785 | 1990 |
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| WELSH & KATZ, LTD 120 S RIVERSIDE PLAZA 22ND FLOOR CHICAGO, IL 60606 | | | NGUYEN, MINH CHAU | |
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| | | | 2145 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/081,560 | ELY ET AL. |
| | Examiner | Art Unit |
| | MINH-CHAU N. NGUYEN | 2145 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 February 2002.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 20 February 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

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DETAILED ACTION

This action is responsive to the amendment of the applicant filed on 01/08/07.

Claims 1-20 are presented for further examination.

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

Correction of the following is required: the specification lacks a description of "tangibly" embodied in a computer-readable medium or in a propagated carrier signal.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 15-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant's disclosure lacks description of what is meant by "tangibly" embodied.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

- Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 15-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention directs to computer software per se because a propagated carrier signal is not a computer hardware.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4,6,8-13,15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bogart et al. (Bogart) (US 6,978,247 B1), and further in view of Cunningham (US 6,941,380 B2).

5. Claim 1, Bogart teaches a business contact center (i.e. multimedia customer contact center 100) for interfacing customers with a business, and the business contact center comprising:
a plurality of media handlers (i.e. handlers 200-212 in figure 2) each including a control interface (i.e. interface 110) and each of the plurality of media

handlers configurable via the control interface to define a plurality of media services (i.e. "each handler is adapted to handle a specific one or more media (i.e. services)) including at least one of routing media between selected media endpoints (i.e. "handlers 200-212 provide switching...They establish connections between contacts and resources"), recording made from a selectable media source, and playing selectable media to a selected media endpoint (abstract; and Col. 1, L. 54-Col. 2, L. 67; and Col. 5, L. 30-Col. 6, L. 67);

a conference controller (i.e. communication layer 106 in multimedia customer contact center 100 in figure 1) coupled with each of the plurality of media handlers (i.e. handlers 200-212 of a contact layer 104 in figure 2) via the corresponding control interface (i.e. interface 110), and the conference controller responsive to a customer contact to configure via the corresponding control interface an available one of the plurality of media handlers to define selected ones of the media services (i.e. a service call), media sources (i.e. resources/agents) and media endpoints (i.e. customer contact such as phone, computer, etc.) for handling the customer contact (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21), the controller including a bandwidth manager (i.e. "the communications layer comprises software for managing communications each comprising one or more contacts in one or more media", thus a bandwidth manager is a software) which responds to the customer contact and selects the available one of the media handlers (Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-59)

Bogart fails to teach the bandwidth manager estimates a bandwidth requirement and selects the available one of the media handlers based upon bandwidth limits. However, Cunningham, in the same field of endeavor having closely related objectivity, teaches the bandwidth manager estimates a bandwidth requirement (i.e. calculating an amount of bandwidth that needs to be requested) (i.e. Col. 7, L. 34-47; and Col. 8, L. 5-10) and selects the available one of the media handlers (i.e. data source 24) based upon bandwidth limits (i.e. "data sources 24 that are registered to use the bandwidth reservation offered by the bandwidth manager 16", it means that the data source is selected based on the reserved bandwidth which has been calculated) (Col. 6, L. 7-62).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Cunningham's teachings of the bandwidth manager estimates a bandwidth requirement and selects the available one of the media handlers based upon bandwidth limits, in the teachings of Bogart in multimedia customer care center having a layered control architecture, for the purpose of tracking and limiting the amount of traffic bandwidth on the network.

6. Claim 2, Bogart and Cunningham disclose the invention substantially as claimed.

Bogart teaches wherein the bandwidth manager (i.e. "the communications layer comprises software for managing communications each comprising one or more contacts in one or more media", thus a bandwidth manager is a software)

manages media handler selection (i.e. handlers 200-212 of a contact layer 104 in figure 2) for each customer contact (Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-59). Besides this, Cunningham teaches comparing the bandwidth requirement to current bandwidth availability on each media handler (i.e. comparing the requested bandwidth to the available bandwidth on the data source) (Col. 7, L. 19-25).

7. Claim 3, Bogart and Cunningham disclose the invention substantially as claimed. Bogart teaches the conference controller (i.e. communication layer 106) further comprises: an event handler (i.e. contact layer 104) for determining a next media event for a customer contact based on a correlation between pre-defined call contact states and status and actual call status (abstract; and Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-Col. 10, L. 21; and Col. 12, L. 4-Col. 13, L. 46).
8. Claim 4, Bogart and Cunningham disclose the invention substantially as claimed. Bogart teaches a plurality of agent communication devices (i.e. resources/agents 220) each having a control interface (i.e. interface 111) coupled to the control interface of the conference controller (i.e. communication layer 106) wherein each of the plurality of agent communication devices is configurable via the corresponding control interface to couple with a selected one of the plurality of media handlers (i.e. handlers 200-212) (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 37-43; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-59).

9. Claim 6, Bogart and Cunningham disclose the invention substantially as claimed.

Bogart teaches each of the plurality of agent communication devices further comprises: an agent interface for accepting input from an agent of requests (i.e. resources/agents 220) and for passing the requests to the conference controller (i.e. communication layer 106) via the control interface to manage a customer contact session (abstract; and Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-59).

10. Claim 8, Bogart teaches a method comprising:

selecting at a conference controller (i.e. communication layer 106 in multimedia customer contact center 100 in figure 1) an available one of a plurality of media handlers (i.e. handlers 200-212 in figure 2) for handling a call with the calling one of the customers (figure 2; and Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21).

passing call parameters (i.e. contact preferences) (Col. 5, L. 4-15) for handling the call with the calling one of the customers from the conference controller (i.e. from a contact layer 104 in multimedia customer contact center 100) to the available one of the media handlers (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21), and

configuring the available one of the plurality of media handlers (i.e. determining an available one of a plurality of resources which is allocated for use

to a particular handler. In other word, once the resource is available, it implies the handler is available) for selected ones of a plurality of media services (i.e. a service call), media sources (i.e. resources/agents) and media endpoints (i.e. customer contact such as phone, computer, etc.) for handling the customer contact, responsive to the passing of the call parameters in the passing act (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 4-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21).

Bogart fails to teach estimating a bandwidth requirement and selecting based upon at least the bandwidth requirement. However, Cunningham, in the same field of endeavor having closely related objectivity, teaches estimating a bandwidth requirement (i.e. calculating an amount of bandwidth that needs to be requested) (i.e. Col. 7, L. 34-47; and Col. 8, L. 5-10) and selecting based upon at least the bandwidth requirement (i.e. "data sources 24 that are registered to use the bandwidth reservation offered by the bandwidth manager 16", it means that the data source is selected based on the reserved bandwidth which has been calculated) (Col. 6, L. 7-62).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Cunningham's teachings of estimating a bandwidth requirement and selecting based upon at least the bandwidth requirement, in the teachings of Bogart in multimedia customer care center having a layered control architecture, for the purpose of tracking and limiting the amount of traffic bandwidth on the network.

11. Claim 9, Bogart and Cunningham disclose the invention substantially as claimed.

Bogart teaches the method for interfacing customers, further comprising in response to the configuring act, at least one of the following acts performed on the available one of the plurality of media handlers of

routing media between selected media endpoints (i.e. "handlers 200-212 provide switching...They establish connections between contacts and resources") (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-59);

recording media from a selectable media source (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-59); and

playing selectable media to a selected media endpoint (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-59).

12. Claim 10, Bogart and Cunningham disclose the invention substantially as claimed. Bogart teaches the call setup parameters passed in the passing act include at least outbound media ports (Col. 9, L. 22-42; and Col. 13, L. 65-Col. 14, L. 43) and a media service type (Table F, Col. 15, L. 56-67).

13. Claim 11, Bogart and Cunningham disclose the invention substantially as claimed. Bogart teaches the selecting act further comprises the act of: managing media handler selection for successive calling ones of the customers to effect a

balancing of relative loads among the plurality of media handlers (i.e. handlers 200-212 in figure 2) (Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-59). Besides this, Cunningham teaches comparing the bandwidth requirement to current bandwidth availability on each media handler (i.e. comparing the requested bandwidth to the available bandwidth on the data source) (Col. 7, L. 19-25).

14. Claim 12, Bogart and Cunningham disclose the invention substantially as claimed. Bogart teaches the passing act further comprises the act of:

determining a next media event for the calling one of the customers based on a correlation between pre-defined call contact states and status and actual call status for the calling one of the customers (abstract; and Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-Col. 10, L. 21; and Col. 12, L. 4-Col. 13, L. 46); and with the configuring act responsive to each determination in the determining act to reconfigure the available one of the plurality of media handlers (Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-Col. 10, L. 21; and Col. 12, L. 4-Col. 13, L. 46).

15. Claim 13, Bogart and Cunningham disclose the invention substantially as claimed. Bogart teaches the method for interfacing customers further comprising the act of: managing the available one of the plurality of media handlers (i.e. handlers 200-212) to define additional selected ones of a plurality of media services (i.e. a service call), media sources (i.e. resources/agents) and media

endpoints (i.e. customer contacts such as phone, computer, etc.) for handling the customer contact from an agent communication device (i.e. agent 220 in figure 2) configured as a media endpoint in the configuring act (i.e. handlers 200-212) (Col. 1, L. 54-Col. 2, L. 36; and Col. 4, L. 37-43; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21).

16. Claims 15-19 are corresponding claims of claims 8-9,11-13. Therefore, they are rejected under the same rationale.

17. Claims 5,7,14,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bogart and Cunningham as applied to claims 1,8,15 above, and further in view of Sonesh et al. (Sonesh) (6,046,762).

18. Claim 5, Bogart and Cunningham are relied upon for the disclosure set forth in the previous rejection. Bogart teaches the communication layer 106 manages the plurality of agent communication devices (i.e. resources) and it responsive to a request for customer contact with an available agent to select an available one of the plurality of agent communication devices for coupling with the corresponding one of the plurality of media handlers handling the corresponding customer contact (Col. 1, L. 54-Col. 2, L. 36; and Col. 4, L. 37-43; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21).

Bogart and Cunningham fail to teach an agent manager coupled to each of the plurality of agent communication devices via the corresponding control

interface, and the agent manager responsive to a request for customer contact with selection of an available agent. However, Sonesh, in the same field of endeavor having closely related objectivity, teaches an agent manager coupled to each of the plurality of agent communication devices via the corresponding control interface, and the agent manager responsive to a request for customer contact with selection of an available agent (Col. 3, L. 50-58; and Col. 5, L. 60-Col. 6, L. 8).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Sonesh's teachings of an agent manager coupled to each of the plurality of agent communication devices via the corresponding control interface, and the agent manager responsive to a request for customer contact with selection of an available agent, with Cunningham's teachings of bandwidth allocation in Ethernet networks, in the teachings of Bogart in multimedia customer care center having a layered control architecture, for the purpose of providing intelligent routing of messages/calls to agents for processing.

19. Claim 7, Bogart and Cunningham are relied upon for the disclosure set forth in the previous rejection. Bogart teaches wherein the plurality of media handlers each further comprise: a call sequencer interacting with selected ones of the plurality of media services defined by each media handler to maintain consecutive sequence numbers in the real time packets output from the media

handler from various media sources during a customer contact session (Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-Col. 10, L. 21; and Col. 15, L. 28-47).

Bogart and Cunningham fail to teach real time protocol (RTP). However, Sonesh, in the same field of endeavor having closely related objectivity, teaches real time protocol (RTP) (Col. 5, L. 15-31).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Sonesh's teachings of real time protocol (RTP), with Cunningham's teachings of bandwidth allocation in Ethernet networks, in the teachings of Bogart in multimedia customer care center having a layered control architecture, for the purpose of providing intelligent routing of messages/calls to agents for processing.

20. Claim 14 is corresponding claim of claim 7. Therefore, it is rejected under the same rationale.

21. Claim 20 is corresponding claim of claim 14. Therefore, it is rejected under the same rationale.

Response to Arguments

Applicant's arguments filed 01/08/07 have been fully considered but they are not persuasive.

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Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-CHAU N. NGUYEN whose telephone number is (571)272-4242. The examiner can normally be reached on Monday-Friday from 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JASON D. CARDONE can be reached on (571) 272-6159. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Minh-Chau Nguyen
Art Unit: 2145

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SUPERVISORY PATENT EXAMINER